

Application No.: 10/519,736
Examiner: JULES, FRANTZ F

REMARKS

In point 1 of the 1 Office action, the Examiner objected to the drawings since they did not illustrate the preferred embodiment found in claims 6 and 11. Applicant has since cancelled claims 6 and 11.

In point 4 of the Office Action, the Examiner objects to the drawings as failing to comply with 37 C.F.R. 1.84 because they do not include the following reference signs mentioned in the description: 2C, 21, and 9. Applicant respectfully points out that on page 3 of the published application (drawing sheet 2 of 3) the cited reference signs can be found. Specifically reference sign 2C can be found as the reference label for the top most illustration. Reference sign 21 can be found in figure 2B. Reference sign 9 can be found in figure 2C.

Applicant has cancelled claims 6 and 11 to comply with 37 C.F.R. 1.83(a). Applicant has amended claims to overcome the Examiner's rejections under 35 U.S.C. § 112, 2nd paragraph. Amended claim 1 now provides a clearer description of the function of supporting roller (22). Additionally, amended claim 1 provides a more precise recitation of the relationship between the lower supporting rollers (22) and the idler wheels (3). Lastly, amended claim 1 provides a clearer description of structure (20). Claim 7 has been amended to recite "track-tightener device". Claim 10 has been amended to remove indefiniteness due to a triple recitation. Claim 10 has been amended to refer to the limitation set fourth in claim 7 concerning "a helicoidal spring". Claim 8 has been amended to provide proper antecedent basis for the limitation "the fixed shoulder".

Claims 1-2, 4-5, and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Adams et al. (U.S. Patent No.: 4,887,872).

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Applicant submits that the cited prior art reference fails to disclose all the elements found in the amended claims. Amended claim 1 now points out that at least one movable supporting roller (22) is in contact with the idler wheel (3) so that the reciprocal distance does not vary during the operating life of the vehicle, under any operating condition and with any range of the track-tightening device. Further more, amended claim 1 points out that the device functions by inserting, at the minimum distance from the idler wheel (3) and maintaining said distance constant, a supporting element such as a movable supporting roller (22), thus putting the tract unit in the best possible operating conditions.

The cited prior art is silent concerning what the Examiner describes as a movable supporting roller. Therefore, from Figure 1 which is the only source of interpreting the feature, Applicant points out that the couple of the guide rollers (26) appears pivotable around the center pin (not labeled).

As such, the assembly in Adams et al. allows the front and rear idlers to pivot forward or backward when the vehicle is driven over rough terrain or obstacles. Additionally, referring for example to the couple of guide rollers (26) associated to the first end portion (25), the assembly allows said rollers (26) to pivot with respect to the idler (18).

Therefore, during the oscillating movement of the frame assembly and the pivoting of the rollers (26), the point in which the track which is wound around the idler (18), leaves the idlers itself and varies in relation to the different reciprocal positions of idler (18) and the adjacent roller (26). Therefore, the length of the track supported by the idler and the guide roller varies.

In contrast, the amended claims point out that the idler wheel (3) finds the immediate support from the movable supporting roller (22). Therefore the track has a minimum length of non-supported section and does not create a significant concavity under conditions of major stress.

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The housing guide system described in Adams et al. operates by means of cooperation of the structure (245) and the recoil assembly (30). This recoil assembly is a non-fluid cylinder (Column 3, line 40), therefore the frame assembly (24) is a cylinder body as well.

The guide system structure (20) and movable structure (8), according to the amended claim 1 possesses a box like shape as opposed to cylindrical shape in order to make production and maintenance easier.

The tensioning of the track chain or track belt used in the crawler machines, such as in Adams et al., is necessary due to the particular geometric shape of the track chain envelope (angle of the track chain side going down to the ground) creates a force trying to press the front idler wheel or the movable structure vertically up and horizontally rearwards. This horizontal force is counteracted by a track tensioner and said force is transmitted to the main frame while the vertical force is counteracted by the upper fittings (26).

In the present invention there is no need for all around constraints as in a cylinder guide system, such as Adams et al. The present invention is designed so that the only forces needed to be counteracted are the vertical upward force and the lateral forces.

Based on the foregoing, it is clear that Adams et al. fails to point out all the specific elements of the amended claims. Therefore, Adams can not be the basis for an anticipation rejection.


The Examiner has rejected claims 3, 6 and 11 as being unpatentable over Adams et al.

Claim 3, 6 and 11 point out non-obvious subject matter because they are dependent directly or indirectly, from claim 1. Specifically, each of the rejected claims recite the limitation that at least one movable supporting roller (22) is in contact with the idler wheel (3) so that the reciprocal distance does not vary during the operating life of the vehicle, under any operating condition and with any range

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of the track-tightening device and that structure (20) is a box structure. Adams et al. fails to point out these elements. Additionally, there is nothing in Adams et al. that provides suggestion or motivation to modify the elements disclosed. Lastly, even if there were sufficient motivation or suggestion to modify the prior art patent, which Applicant does not concede, the resulting disclosure would still fail to point out the elements of the amended claims. The prior art is designed around a cylinder guide system. Any obvious modification of the prior art would still point out a cylinder guide system. The present invention points out a box shaped structure that provides improved performance and ease of manufacture. As such the rejected claims are not obvious in light of the cited prior art patent.

Respectfully Submitted,


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